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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/776,169 | 02/12/2004 | Helmut Ortmann | 32140-199508 | 3770 |
| 26694 | 7590 | 11/30/2005 | EXAMINER | |
| VENABLE LLP | | | OMGBA, ESSAMA | |
| P.O. BOX 34385 | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20045-9998 | | | 3726 | |

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/776,169 | ORTMANN ET AL. | |
| | Examiner | Art Unit | |
| | Essama Omgba | 3726 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donaldson (US Patent 4,823,703) or Schildknecht et al. (US Patent 6,883,435) in view of Kast (US Patent 3,579,805).

With regards to claims 1-3 and 7, Donaldson discloses a method for producing a penetrator having a steel jacket 5 and a heavy-metal core 1 wherein the steel jacket and the heavy-metal core are bonded together by shrink fitting or adhesive, see column 3, lines 21-25. Schildknecht et al. also discloses producing a penetrator having a steel jacket and a heavy-metal inner component wherein the steel jacket and the heavy-metal inner component being connected to each other by shrink fitting, see column 2, lines 25-31. Although Donaldson nor Schildknecht et al. disclose heating the steel jacket to a temperature between 70 to 350°C, inserting the heavy-metal core into the heated steel jacket and allowing the steel jacket to cool down, however such shrink fitting steps are conventional in the art as attested by Kast, see column 1, lines 22-47. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have produced the shrink fitting of the penetrators of Donaldson or Schildknecht et al. according to the method of Kast, as is conventional in the art.

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Applicant should note that the heating temperatures would depend on the particular materials being used. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have heated the steel jacket of Donaldson to the appropriate temperature in order to sufficiently expand the steel jacket and realize an effective shrink fitting as is within the general knowledge of one of ordinary skill in the art.

With regards to claims 4-6 and 8-10, Applicant should note the process of producing the materials and the shape of the materials lend no patentable weight to the method being claimed.

Response to Arguments

3. Applicant's arguments with respect to claims 1-3 and 7 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments filed September 14, 2005 with respect to claims 4-6 and 8-10 have been fully considered but they are not persuasive.

In response to Applicant disagreeing with the examiner's position that the process of producing the material and the shape of the material lend no patentable weight to the method being claimed because all words in a claim must be considered in judging the patentability of that claim against the prior, the examiner submits that all words of the claims were considered in judging the patentability of the claims. The process by which the steel jacket was produced is inconsequential in carrying out the claimed method. The process of making the steel jacket and the structure or shape of the elements are


two different another statutory classes of invention that would have to be claimed in other applications if Applicant so desires.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Jimenez can be reached on (571) 272-4530. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Essama Omgba
Primary Examiner
Art Unit 3726